PENGARUH KOMBINASI SEDUHAN BAWANG DAYAK (*Eleutherine palmifolia)* DAN MADU TERHADAP PENURUNAN GLUKOSA DARAH SEWAKTU PADA TIKUS DIABETES MELLITUS INDUKSI STREPZOTOCIN

Sri Asri Khumaira Ningtyas , Saryono , Yunita Sari

ABSTRAK

Latar Belakang : Diabetes mellitus merupakan penyakit kronik yang sering dijumpai pada masyarakat Indonesia maupun dunia. Bawang Dayak *(Eleutherine palmifolia)* dan Madu berpotensi untuk menurunkan kadar glukosa darah.

Tujuan Penelitian : Mengetahui pengaruh kombinasi seduhan bawang dayak dan madu dalam menurunkan kadar glukosa darah.

Metodologi : Penelitian ini menggunakan metode *true experiment* dengan *pretest-posttest with control group design*. Sampel berjumlah 30 ekor tikus yang dibagi menjadi 6 kelompok. Kelompok (A) kontrol sehat, kelompok (B) kontrol negatif, kelompok (C, D, dan E) diberikan dosis bawang dayak masing-masing 0,1 g/kgBB, 0,2 g/kgBB, dan 0,4 g/kgBB yang dikombinasikan dengan madu 1 ml/kgBB, serta kelompok (F) diberikan metformin 9 mg/200grBB. Intervensi dilakukan selama 14 hari. Kadar GDS *pre test* diuji dengan *One Way* ANOVA dan dilanjutkan dengan *Post-hoc Bonferroni*, sedangkan GDS *post test* diuji dengan *Kruskal-Wallis* dan dilanjutkan dengan *Mann-Whitney*.

Hasil : Hasil penelitian menunjukkan bahwa pemberian kombinasi seduhan bawang dayak dan madu terbukti dapat menurunkan kadar GDS. Rerata selisih *pretest-posttest* GDS pada masing-masing dosis adalah 2.1940 ± 0.40472, 2.0142 ± 0.41476, dan 2.1209 ± 0.37345.

Kesimpulan : Pemberian kombinasi seduhan bawang dayak dosis 0,1g/kgBB dan madu 1 ml/kgBB merupakan dosis paling efektif dalam menurunkan GDS.

Kata Kunci: Diabetes Mellitus, glukosa darah sewaktu, hiperglikemia, kombinasi bawang dayak dan madu.

THE EFFECTS OF COMBINATION ONION DAYAK *(Eleutherine palmifolia)* AND HONEY FOR REDUCTION BLOOD GLUCOSE LEVEL ON THE RATS WITH DIABETES MELLITUS INDUCED WITH STREPZOTOCIN

Sri Asri Khumaira Ningtyas , Saryono , Yunita Sari

ABSTRACT

Backgrounds : Diabetes mellitus is a chronic disease that is often found in Indonesians and in the world. Dayak onions *(Eleutherine palmifolia)* and honey have the potential to lower blood glucose levels.

Purposes : To determine the effect of the combination of Dayak onion and honey brewing in reducing blood glucose levels.

Methodology : This study used a true experimental method with a pretest-posttest control group design. The sample consisted of 30 rats which were divided into 6 groups. Group (A) healthy control, group (B) negative control, groups (C, D, and E) were given a dose of Dayak onion, respectively 0.1 g / kg, 0.2 g / kg, and 0.4 g / kgBB combined with honey 1 ml / kgBB, and group (F) was given metformin 9 mg / 200grBB. The intervention was carried out for 14 days. The pre-test GDS levels were tested by One Way ANOVA and followed by Post-hoc Bonferroni, while the post-hoc GDS levels were tested with Kruskal-Wallis and followed by Mann-Whitney.

Results : The results showed that giving a combination of infused Dayak onions and honey was proven to reduce GDS levels. The mean pretest-posttest GDS differences at each dose were 2.1940 ± 0.40472, 2.0142 ± 0.41476, and 2.1209 ± 0.37345.

Conclusion : The combination of Dayak onion infusion dose 0.1g / kgBB and honey 1 ml / kgBB is the most effective dose in reducing GDS.

Key Words : Diabetes Mellitus, blood glucose levels, hyperglycemia, combination onion dayak and honey.